

Notice of Allowability

Application No.

09/889,888

Examiner

David M Gray

Applicant(s)

SOGABE ET AL.

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed June 6, 2003.
2. ☒ The allowed claim(s) is/are 2 and 5.
3. ☒ The drawings filed on 24 July 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____ | 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other _____ |

Art Unit: 2851

Examiner's Amendment

1. Claim 2 has been amended as shown on the attached examiner's amendment. This amendment is to correct an obvious typographical error. Claim 5 has been reproduced in order to provide a complete set of claims.

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance:


3. The prior art does not disclose or suggest a "rotationally symmetric surface portion", a "cylindrical portion" and a "connection section" in combination with the remaining claim elements as in claims 2 and 5.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M Gray whose telephone number is 703-308-1698. The examiner can normally be reached on M-T & T-F 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703-308-2847. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

A handwritten signature in black ink, appearing to read 'David M Gray', with a large, stylized loop at the end.

David M Gray
Primary Examiner
Art Unit 2851

July 24, 2003

Art Unit: 2851

Replace claims 2 and 5 with the following.

2. An omnidirectional visual camera comprising:

a reflecting member comprising:

a rotationally symmetric surface portion comprising a convex surface of a secondary rotationally symmetric curved surface;

a cylindrical portion having cylindrical walls surrounding said rotationally symmetric surface portion and a cylindrical axis of rotation substantially aligning with an axis of rotation of said rotationally symmetric surface, and having a cylindrical inner diameter larger than an outer diameter of said rotationally symmetric surface portion; and

a connection section for connecting one longitudinal end of said cylindrical portion with the outer diameter portion of said rotationally symmetric surface portion;

said rotationally symmetric surface portion, said cylindrical portion, and said connection section being integrally molded of a transparent material,

said rotationally symmetric surface portion comprising a mirror surface; and

a camera having an optical axis substantially aligning with the axis of rotation of said reflecting member and installed opposite to the convex surface of said rotationally symmetric surface portion,

said camera located for picking up a reflected image reflected from the convex surface of the rotationally symmetric surface portion of said reflecting member.

5. The omnidirectional visual camera according to Claim 2, wherein one end surface of the cylindrical portion to which the rotationally symmetric surface portion is connected has a smaller diameter than the other end thereof.